

FIG. 1
PRIOR ART

The diagram illustrates a network architecture with the following components and connections:

- 40**: A mobile phone connected to the Radio Access Network.
- 42**: RADIO ACCESS NETWORK.
- 44**: PACKET DATA SUBSYSTEM.
- 52**: PDN (Public Data Network).
- 50**: A laptop computer connected to the PDN.
- 62**: PSTN/PLMN (Public Switched Telephone Network / Public Land Mobile Network).
- 60**: A landline phone connected to the PSTN/PLMN.
- 30**: MULTIMEDIA RESOURCE FUNCTION PROCESSOR.
- 24**: MEDIA GATEWAY.
- 26**: MEDIA GATEWAY CONTROL FUNCTION.
- 32**: MULTIMEDIA RESOURCE FUNCTION CONTROLLER.
- 28**: BORDER GATEWAY CONTROL FUNCTION.
- 22**: CALL SESSION CONTROL FUNCTION.
- 38**: VOICEMAIL/MULTIMEDIA MAIL SERVER (VMS/MMS).
- 36**: APPLICATION SERVERS.
- 34**: HOME SUBSCRIBER SERVER.

Connections are categorized into two types:

- CONTROL**: Represented by dashed lines.
- BEARER**: Represented by solid lines.

Key connections include:

- Bearer path from mobile phone (40) through Radio Access Network (42) and Packet Data Subsystem (44) to the PDN (52) and PSTN/PLMN (62).
- Control paths connecting the Packet Data Subsystem (44) to the Multimedia Resource Function Processor (30), Media Gateway (24), and Call Session Control Function (22).
- Control paths connecting the Media Gateway (24) to the Media Gateway Control Function (26) and the Call Session Control Function (22).
- Control paths connecting the Call Session Control Function (22) to the Multimedia Resource Function Controller (32), the Border Gateway Control Function (28), the Voicemail/Multimedia Mail Server (38), and the Application Servers (36).
- Control paths connecting the Home Subscriber Server (34) to the Call Session Control Function (22) and the Application Servers (36).